
HSB83J

Silicon Epitaxial Planar Diode for High Voltage Switching

HITACHI

ADE-208-489(Z)
Rev 0

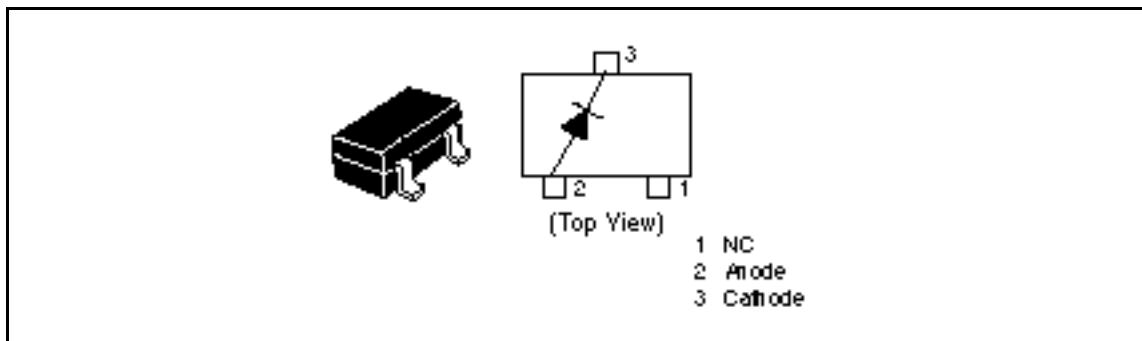
Features

- High reverse voltage. ($V_R = 250V$)
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSB83J	F7	CMPAK

Outline



HSB83J

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	300	V
Reverse voltage	V_R	250	V
Peak forward current	I_{FM}	300	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*1}	2	A
Average rectified current	I_O	100	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Note: 1. Value at duration of 10msec.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.2	V	$I_F = 100 \text{ mA}$
Reverse current	I_{R1}	—	—	0.2	μA	$V_R = 250\text{V}$
	I_{R2}	—	—	100		$V_R = 300\text{V}$
Capacitance	C	—	—	3.0	pF	$V_R = 0\text{V}, f = 1 \text{ MHz}$
Reverse recovery time	t_{rr}	—	—	100	ns	$I_F = I_R = 30 \text{ mA}, I_{rr} = 3\text{mA}, R_L = 100$

Main Characteristic

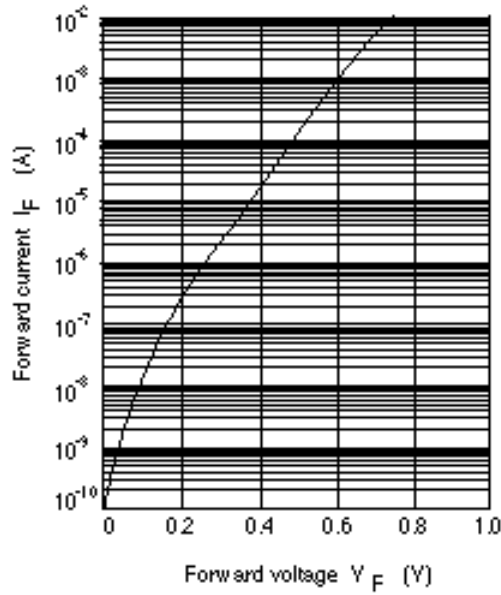


Fig.1 Forward current Vs. Forward voltage

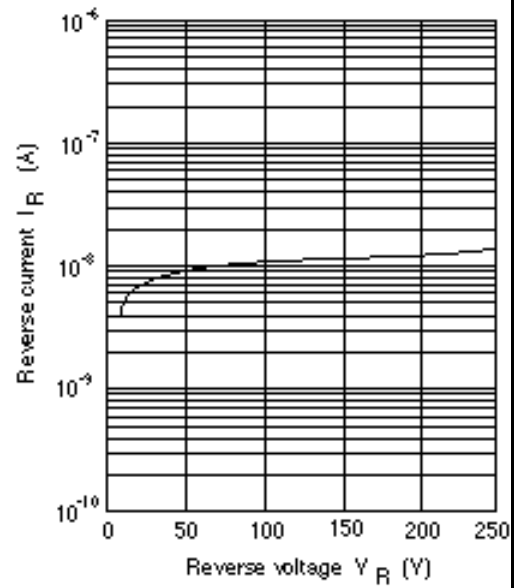


Fig.2 Reverse current Vs. Reverse voltage

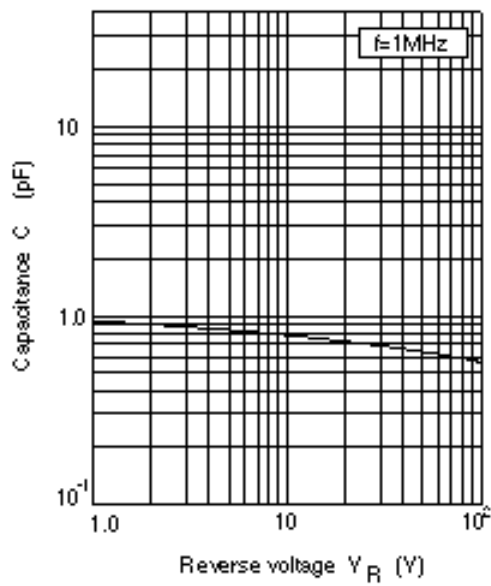


Fig.3 Capacitance Vs. Reverse voltage

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Package Dimensions

Unit : mm

